IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of
WOODFILL, et al

Examiner: Unassigned

Art Unit: Unassigned

Serial No.   Unassigned

Docket No.   INT1P102C2

Filed: Herewith

December 14, 2001

For: DATA PROCESSING SYSTEM
AND METHOD

AMENDMENT A

Assistant Commissioner for Patents
Washington, DC 20231

Dear Sir:

Prior to the examination of the application on the merits, please amend the application as

follows:

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-2.

Please add claims:

3.   A census transform generator for generating census vectors for elements of a data set having a plurality of elements, comprising:

a row delay unit having a plurality of delays for receiving an ordered stream of elements of the data set and propagating the ordered stream of elements through the plurality of delays.

4.   A census transform generator for generating census vectors for elements of a data set having a plurality of elements, comprising:

a comparator unit having a plurality of comparators for receiving elements of the data set and comparing a received reference element to each of a selected plurality of received elements in order to generate a census vector for the reference element.

5.   A census transform generator for generating census vectors for elements of a data set having a plurality of elements, comprising:

a row delay unit having a plurality of delays for receiving an ordered stream of elements of the data set and propagating the ordered stream of elements through the plurality of delays; and

a comparator unit, coupled to the row delay unit and having a plurality of comparators, for receiving elements of the data set that propagated through the row delay unit, and comparing a received reference element to each of a selected plurality of received elements in order to generate a census vector for the reference element.

6.   The census transform generator of claim 5 wherein:

the elements of the data set represent pixel intensities of an image having M rows and N columns of pixels;

the row delay unit includes a plurality of groups of delays, each group having N delays, wherein the groups are interconnected such that the ordered stream of elements propagates among the groups; and

the census transform generator generates census vectors for reference elements within a census transform window having a number of rows substantially equal to the number of groups of delays in the row delay unit.

CLEAN COPY OF PENDING CLAIMS

Claims 3- 6 are pending.

3.   A census transform generator for generating census vectors for elements of a data set having a plurality of elements, comprising:
a row delay unit having a plurality of delays for receiving an ordered stream of elements of the data set and propagating the ordered stream of elements through the plurality of delays.

4.   A census transform generator for generating census vectors for elements of a data set having a plurality of elements, comprising:
a comparator unit having a plurality of comparators for receiving elements of the data set and comparing a received reference element to each of a selected plurality of received elements in order to generate a census vector for the reference element.

5.   A census transform generator for generating census vectors for elements of a data set having a plurality of elements, comprising:
a row delay unit having a plurality of delays for receiving an ordered stream of elements of the data set and propagating the ordered stream of elements through the plurality of delays; and
a comparator unit, coupled to the row delay unit and having a plurality of comparators, for receiving elements of the data set that propagated through the row delay unit, and comparing a received reference element to each of a selected plurality of received elements in order to generate a census vector for the reference element.

6.   The census transform generator of claim 5 wherein:
the elements of the data set represent pixel intensities of an image having M rows and N columns of pixels;
the row delay unit includes a plurality of groups of delays, each group having N delays, wherein the groups are interconnected such that the ordered stream of elements propagates among the groups; and
the census transform generator generates census vectors for reference elements within a census transform window having a number of rows substantially equal to the number of groups of delays in the row delay unit.

7.   A method for generating census vectors for elements of a data set having a plurality of elements, comprising:
receiving an ordered stream of elements of the data set; and
propagating the ordered stream of elements through a plurality of delays.

8.   A method for generating census vectors for elements of a data set having a plurality of elements, comprising:
receiving elements of the data set; and
comparing a received reference element to each of a selected plurality of received elements in order to generate a census vector for the reference element.

9.   A method for generating census vectors for elements of a data set having a plurality of elements, comprising:

        receiving an ordered stream of elements of the data set;

        propagating the ordered stream of elements through a plurality of delays;

        receiving the propagated elements of the data set; and

        comparing a received reference element to each of a selected plurality of received elements in order to generate a census vector for the reference element.

REMARKS

Claims 1-2 have been cancelled and new claims 3-9 have been added.

Consideration of the application and allowance of all claims are respectfully requested based on the preceding remarks. If at any time the Examiner believes that an interview would be helpful, please contact the undersigned.

Respectfully submitted,

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